

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An image processing system, comprising:

a client apparatus connected with a communication network, the client apparatus including

a ~~storing part~~ storage unit configured to store a reversible code which is obtained by reversibly compressing and coding an original image according to a predetermined coding algorithm having a hierarchy configuration from a reversible ~~[[part]]~~ unit through a non-reversible ~~[[part]]~~ unit;

an altering ~~[[part]]~~ unit configured to generate, from the reversible code, a non-reversible code;

an editing ~~[[part]]~~ unit configured to perform an editing operation on a non-reversible code image obtained from decoding the non-reversible code, to store the editing operation, and to apply the editing operation to the reversible code;

a transmission ~~[[part]]~~ unit configured to transmit either the reversible or the non-reversible code, or an image obtained from decoding the reversible code or the non-reversible code, to a predetermined transmission destination; ~~[[and]]~~

a selecting ~~[[part]]~~ unit configured to selectively perform transmission of the non-reversible code or the reversible code, or ~~[[the]]~~ an image obtained from decoding the reversible code or the non-reversible code; and

a determining unit configured to determine whether contents of an operation of editing or modifying image data which are applied to the image data in a form of reversible code or the original image were performed by the client apparatus or by another external apparatus.

Claim 2 (Previously Presented): The image processing system as claimed in claim 1,  
wherein:

the coding algorithm is a method according to JPEG 2000.

Claim 3 (Canceled).

Claim 4 (Currently Amended): The image processing system as claimed in claim 1,  
wherein:

the selecting ~~[[part]]~~ unit is configured to transmit the reversible code having  
information indicating that contents of operation of editing or modifying image data are  
attached thereto.

Claim 5 (Currently Amended): The image processing system as claimed in claim 1,  
wherein:

~~the client apparatus includes a determining part configured to determine whether  
contents of operation of editing or modifying for image data are actually reflected on the  
image data in a form of reversible code or the original image by an own apparatus or by  
another external apparatus; and~~

the selecting~~[[part]]~~ unit, when a determination is made by said determining ~~[[part]]~~  
unit that the contents of operation of editing or modifying for the image data are actually  
reflected on the image data in the form of the reversible code or the original image by another  
external apparatus, is configured to transmit the reversible code having information indicating  
that the contents of operation of editing or modifying the image data are attached thereto.

Claim 6 (Currently Amended): The image processing system as claimed in claim 1, further comprising a server apparatus which is also connected with a predetermined communication network,

wherein:

when receiving information indicating contents of operation of editing or modifying image data is attached, the server apparatus is configured to perform processing of actually reflecting the contents of operation of editing or modifying on the image data in the form of the reversible code or the original image according to the information received.

Claim 7 (Currently Amended): An image forming apparatus, comprising:

a coding ~~[[part]]~~ unit configured to reversibly compress and code an original image according to a predetermined coding algorithm having a hierarchy configuration from a reversible ~~[[part]]~~ unit through a non-reversible ~~[[part]]~~ unit to generate a reversible code;

a ~~storing part~~ storage unit configured to store the reversible code;

a decoding ~~[[part]]~~ unit configured to decode the reversible code;

a printer engine configured to perform image formation on a medium based on ~~[[the]]~~ a reversible code image;

an altering ~~[[part]]~~ unit configured to generate a non-reversible code from the reversible code stored;

an editing ~~[[part]]~~ unit configured to perform an editing operation on a non-reversible code image obtained from decoding the non-reversible code, to store the editing operation, and to apply the editing operation to the reversible code;

a transmission ~~[[part]]~~ unit configured to transmit either the reversible or the non-reversible code, or an image of the reversible code or the non-reversible code obtained from

decoding the reversible code or the non-reversible code by said decoding [[part]] unit, to a predetermined transmission destination; [[and]]

a selecting [[part]] unit configured to selectively perform transmission of the non-reversible or reversible code, image or the non-reversible code image obtained from decoding the reversible code or in a form of the non-reversible code or in a form of the reversible code generated, or the reversible code; and

a determining unit configured to determine whether contents of an operation of editing or modifying image data which are applied to the image data in a form of reversible code or the original image were performed by the image forming apparatus or by another external apparatus.

Claim 8 (Currently Amended): The image forming apparatus as claimed in claim 7, wherein:

said selecting [[part]] unit is configured to transmit the image in the form of the reversible code when the image data in the form of the reversible code is provided to the printer engine.

Claim 9 (Currently Amended): The image forming apparatus as claimed in claim 7, wherein:

said selecting [[part]] unit is configured to transmit the image in a form of the non-reversible code when [[the]] image data in the form of the non-reversible code is used for displaying the image on a display device of either another external apparatus or in an own the image forming apparatus for the purpose of performing an operation of editing or modifying the image data.

Claim 10 (Currently Amended): The image forming apparatus as claimed in claim 7, wherein:

said coding [[part]] unit is configured to apply a method according to JPEG 2000 for the predetermined coding algorithm.

Claim 11 (Currently Amended): The image forming apparatus as claimed in claim 7, further comprising an image input device configured to read the original image, wherein:

said coding [[part]] unit is configured to perform the compression and coding on an image read in by said image input device.

Claim 12 (Currently Amended): A computer readable storage medium encoded with instructions, which when executed by a computer cause the computer to execute a method comprising:

storing a reversible code which is obtained by reversibly compressing and coding an original image according to a predetermined coding algorithm having a hierarchy configuration from a reversible [[part]] unit through a non-reversible [[part]] unit;

generating, from the reversible code, a non-reversible code;

performing an editing operation on a non-reversible code image obtained from decoding the non-reversible code;

storing the editing operation;

applying the editing operation to the reversible code;

transmitting either the reversible or the non-reversible code, an image obtained from decoding the reversible code, or an image obtained from decoding the non-reversible code, to a predetermined transmission destination; [[and]]

selectively performing transmission of the non-reversible code or the reversible code, the image obtained from decoding the reversible code or the image obtained from decoding the non-reversible code; and

determining whether contents of an operation of editing or modifying image data which are applied to the image data in a form of reversible code or the original image were performed by a client apparatus executing said method or by another external apparatus.

Claim 13 (Previously Presented): The computer readable storage medium as claimed in claim 12, wherein:

in said selectively performing transmission, the image in a form of the reversible code is transmitted when it is provided for being used for printing processing.

Claim 14 (Currently Amended): The computer readable storage medium as claimed in claim 12, wherein:

in said selectively performing transmission, the image in a form of the non-reversible code is transmitted when it is used for displaying the image in a display device for the purpose of performing an operation of editing or modifying [[the]] image data.

Claim 15 (Previously Presented): The computer readable storage medium as claimed in claim 12, wherein:

in said generating, a method according to JPEG 2000 is applied for the predetermined coding algorithm.

Claims 16-19 (Canceled).

Claim 20 (Currently Amended): An image processing method, comprising:

storing a reversible code which is obtained by reversibly compressing and coding an original image according to a predetermined coding algorithm having a hierarchy configuration from a reversible ~~[[part]]~~ unit through a non-reversible ~~[[part]]~~ unit;

generating, from the reversible code, a non-reversible code;

performing an editing operation on a non-reversible code image obtained from decoding the non-reversible code;

storing the editing operation;

applying the editing operation to the reversible code;

transmitting either the reversible or the non-reversible code, a reversible code image obtained from decoding the reversible code, or ~~[[the]]~~ a non-reversible code image obtained from decoding the non-reversible code, to a predetermined transmission destination; ~~[[and]]~~

selectively performing transmission of the non-reversible code or the reversible code, the image obtained from decoding the reversible code or the image obtained from decoding the non-reversible code; and

determining whether contents of an operation of editing or modifying image data which are applied to the image data in a form of reversible code or the original image were performed by a client apparatus executing said method or by another external apparatus.

Claim 21 (Previously Presented): The image processing method as claimed in claim 20, wherein:

in said selectively performing transmission, the image in a form of the reversible code is transmitted when it is provided for being used for printing processing.

Claim 22 (Currently Amended): The image processing method as claimed in claim 20, wherein:

in said selectively performing transmission, the image in a form of the non-reversible code is transmitted when it is used for displaying the image in a display device for the purpose of performing an operation of editing or modifying ~~[[the]]~~ image data.

Claim 23 (Previously Presented): The image processing method as claimed in claim 20, wherein:

in said generating, a method according to JPEG 2000 is applied for the predetermined coding algorithm.

Claim 24 (Currently Amended): An image processing method using a client apparatus connected with a communication network, wherein:

the client performs:

storing a reversible code which is obtained by reversibly compressing and coding an original image according to a predetermined coding algorithm having a hierarchy configuration from a reversible ~~[[part]]~~ unit through a non-reversible ~~[[part]]~~ unit;

generating, from the reversible code, a non-reversible code;

performing an editing operation on a non-reversible code image obtained from decoding the non-reversible code;

storing the editing operation;

applying the editing operation to the reversible code;

transmitting either the reversible or the non-reversible code, or a reversible code image obtained from decoding the reversible code, or ~~[[the]]~~ a non-reversible code image



obtained from decoding the non-reversible code, to a predetermined transmission destination;  
[[and]]

selectively performing transmission of the non-reversible code or the reversible code,  
the image obtained from decoding the reversible code or the image obtained from decoding  
the non-reversible code; and

determining whether contents of an operation of editing or modifying image data  
which are applied to the image data in a form of reversible code or the original image were  
performed by the client apparatus or by another external apparatus.

Claim 25 (Previously Presented): The image processing method as claimed in claim  
24, wherein:

in said generating, a method according to JPEG 2000 is applied for the predetermined  
coding algorithm.

Claim 26 (Currently Amended): The image processing method as claimed in claim  
24, wherein:

in said selectively performing transmission, the image in a form of the non-reversible  
code is performed when, in the client apparatus, the image is displayed with a use of the  
generated code transmitted, and therewith, operation of editing or modifying is performed on  
[[the]] image data.

Claim 27 (Currently Amended): The image processing method as claimed in claim  
24, wherein:

in said selectively performing transmission, the reversible code having information indicating that [[the]] contents of operation of editing or modifying image data are attached thereto is transmitted.

Claim 28 (Currently Amended): The image processing method as claimed in claim 24, wherein:

~~the client apparatus determines whether contents of the editing operation are actually reflected on the image data in the form of the reversible code or the original image by an own apparatus or by another external apparatus; and~~

in the selectively performing transmission, when a determination is made that the contents of the editing operation are actually reflected on the image data in the form of the reversible code or the original image by the another external apparatus, the reversible code having information indicating that the contents of operation of editing or modifying for the image data are attached thereto is transmitted.

Claim 29 (Previously Presented): The image processing method as claimed in claim 24, wherein:

when information indicating contents of the editing operation is received in a server apparatus which is also connected with the predetermined communication network from the client apparatus, processing actually reflecting the contents of operation of editing or modifying on the image data in the form of the reversible code or the original image according to the information received is performed.

Claim 30 (Currently Amended): The image processing system as claimed in claim 1, further comprising:

a decoding ~~[[part]]~~ unit configured to decode all of the reversible code, and the editing ~~[[part]]~~ unit is configured to apply the editing operation to an image obtained from decoding all of the reversible code.

Claim 31 (Currently Amended): The image processing system as claimed in claim 1, further comprising:

a decoding ~~[[part]]~~ unit configured to decode less than all of the reversible code, and the editing ~~[[part]]~~ unit is configured to apply the editing operation to an image obtained from decoding ~~[[the]]~~ a portion of the reversible code.